PS-T33

US Model
AEP Model
UK Model
E Model

STEREO TURNTABLE SYSTEM

SPECIFICATIONS

GENERAL

Power Requirements: 120V ac, 60Hz (US model)
220V ac, 50/60Hz (AEP model)
240V ac, 50/60Hz (UK model)
110-120V, 220-240V ac adjustable, 50/60Hz (E model)

Power Consumption: 6W (US model)
8W (AEP, UK, E model)

Dimensions: Approx. 430(w) x 140(h) x 375(d) mm
17(w) x $5^{5}/_{8}$ (h) x $14^{3}/_{4}$(d) inches
including projecting parts and controls

Weight: Approx. 6.5kg, 14lb 5oz (net)
Approx. 8.3kg, 18lb 5oz (in shipping carton)

TURNTABLE

Platter: 31 cm ($12^{1}/_{4}$ inches), aluminum-alloy diecast

Motor: Linear BSL (brushless and slotless) motor

Drive System: Direct drive

Control System: Magnedisc servo control system

Speed: $33^{1}/_{3}$ rpm, 45 rpm

Pitch Control Range: ±4%

Wow and Flutter: 0.02% (WRMS)*, 0.025% (WRMS)
±0.04% (DIN)

Signal-to-noise Ratio: 75 dB (DIN-B)

Automatic System: Lead-in, return, reject, repeat

TONEARM

Type: Statically balanced

Pivot-to-stylus Length: 216.5 mm ($8^{1}/_{2}$ inches)

Overall Arm Length: 300 mm ($11^{7}/_{8}$ inches)

Overhang: 16.5 mm ($^{21}/_{32}$ inches)

Tracking Error: +3°, −1°

Stylus Force
Adjustment Range: 0 – 2.5 g

Cartridge Shell Weight: 5 g

Cartridge Weight Range: (including supplied shell)
7.5 – 11.5 g
11 – 15 g (with extra weight)

* This new measuring method concerns only the turntable assembly, including the platter. It excludes wow and flutter caused by the tonearm, the cartridge, or the record. Measured by obtaining signal from magnetic pick-up head.

– Continued on page 2 –

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SONY

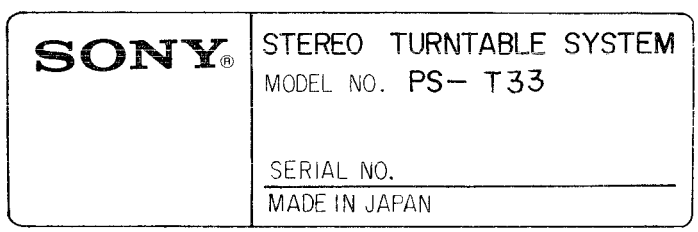
SERVICE MANUAL

CARTRIDGE (XL-15A) (AEP, UK, E model)

Type:	Moving-magnet
Frequency Response:	10 – 30,000 Hz
Channel Separation:	25 dB at 1 kHz
Output Voltage:	4 mV at 1 kHz, 5 cm/sec, 45°
Load Impedance:	50 kΩ – 100 kΩ
Tracking Force:	1.2 – 2.5 g (1.7 g recommended)
Stylus:	Sony ND-15GA Conical 0.6 mil diamond
Weight:	5 g

MODEL IDENTIFICATION

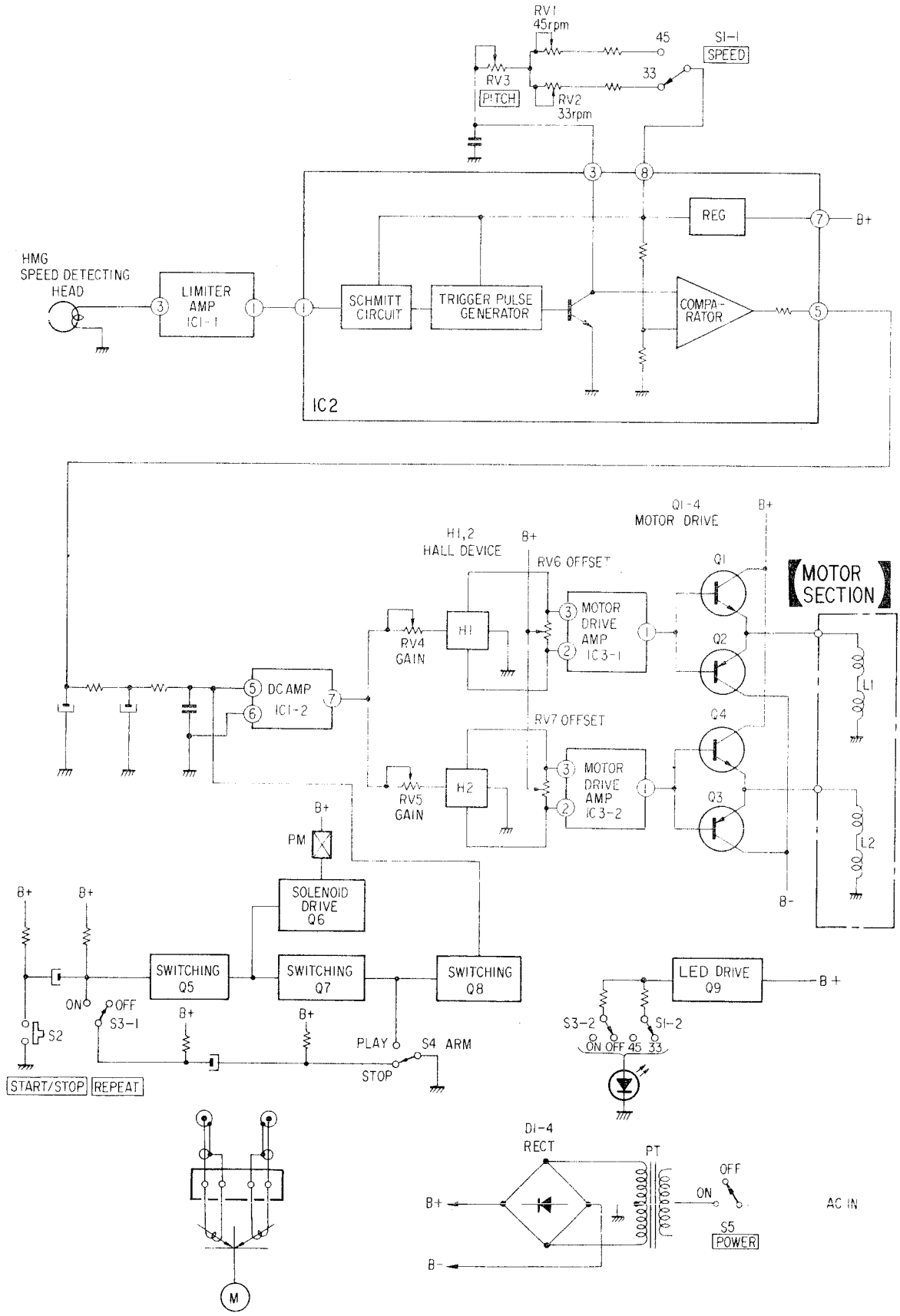
– Specification Label –



AC120V 60Hz 6W	US model
AC220V 50/60Hz 8W	AEP model
AC110~120V, 220~240V 50/60Hz 8W ...	E model
AC240V 50/60Hz 8W	UK model

SECTION 1
OUTLINE

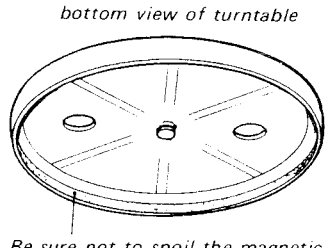
1-1. BLOCK DIAGRAM



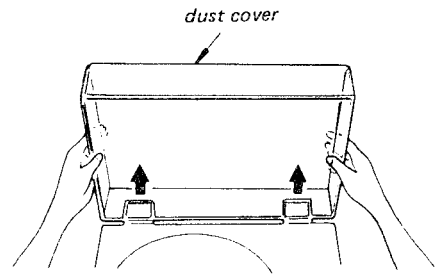
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

REPAIR CAUTION

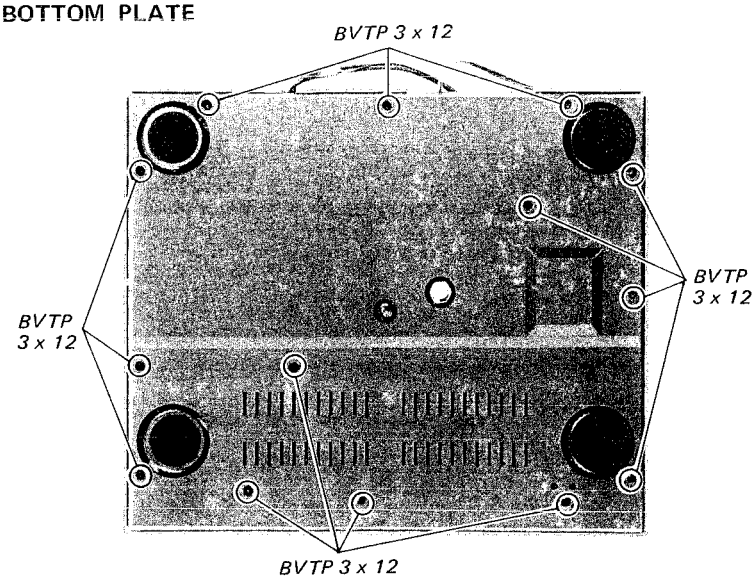


DUST COVER

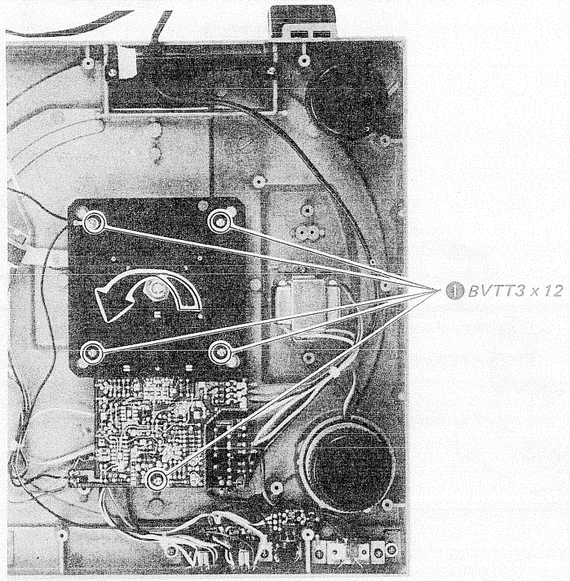


- **Remove the turntable and the turntable sheet.**

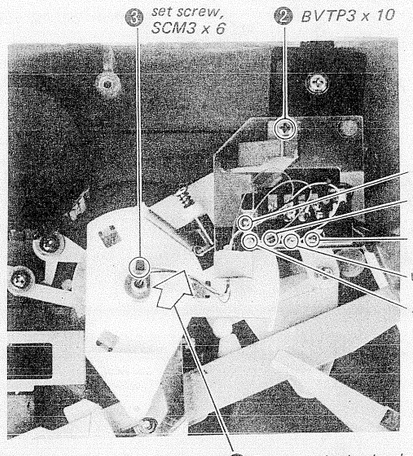
BOTTOM PLATE

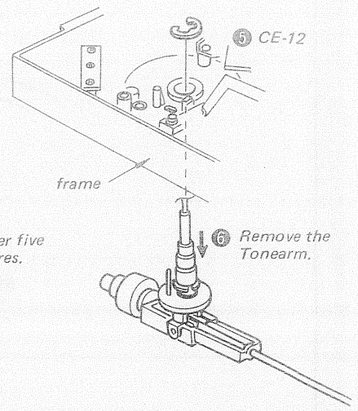


MOTOR



TONEARM





ANTI-SKATING COMPENSATOR KNOB INSTALLATION

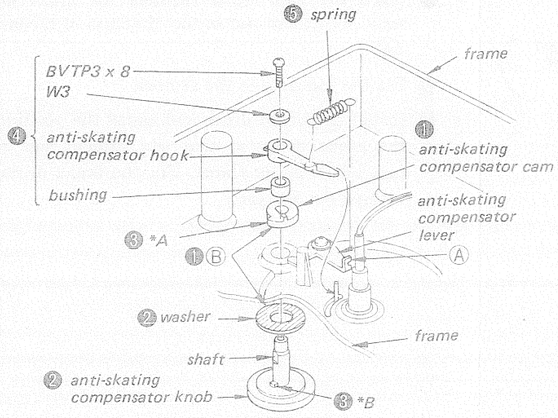


Fig. 2-1

1. Smear the shaded portion (B) of the washer and the anti-skating compensator cam.
2. Install a washer to the anti-skating compensator knob.
3. Set the marked point (*B) of the anti-skating compensator knob as shown in Fig. 2-1.
   Install it through the frame and set it with the anti-skating compensator cam.
   Be sure that the two marked points (*A and *B) coincides.
4. Place the bushing, anti-skating compensator hook and washer (W3) on the shaft and fasten them with screw (BVTP3 x 8).
5. Connect the anti-skating compensator hook and the anti-skating compensator lever with a spring and apply a bond at point (A) of the lever.
6. After the installation has been completed, be sure that the anti-skating compensator hook moves on its own.

DRIVE GEAR INSTALLATION

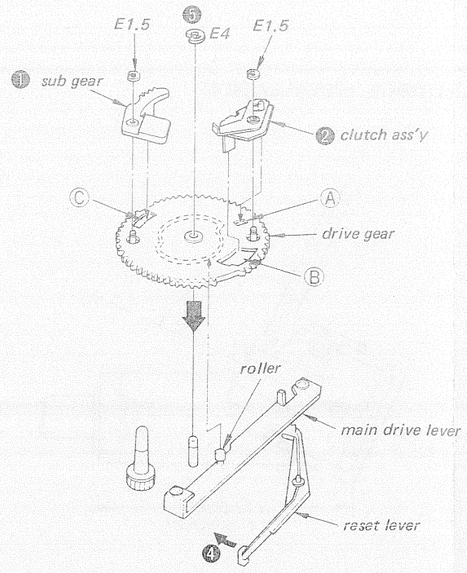


Fig. 2-2

1. Set the sub gear in hole (C) and fasten with El. 5.
2. Set the clutch ass'y in hole (A) and (B) and fasten with El. 5.
3. After installation has been completed, make sure that they move on its own.
4. Push the reset lever in the direction of the arrow and install the drive gear.
   Confirm that the roller on the main drive gear rolls within the groove of the drive gear.
5. Fasten with E4.

BRAKE DRUM INSTALLATION

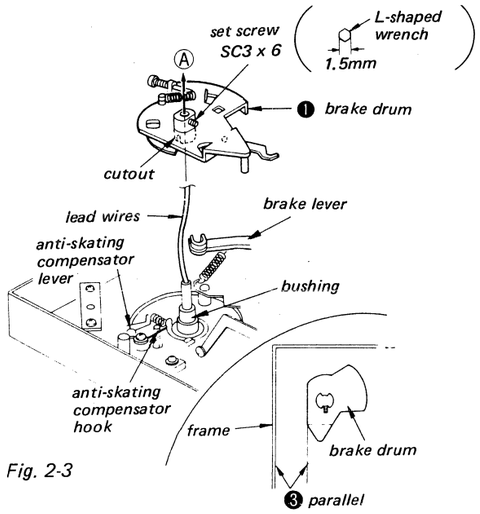


Fig. 2-3

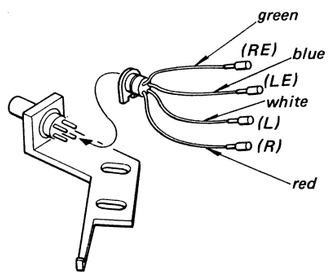
❶ Place the lead wires through the brake drum ass'y. Pull them out in the direction of the arrow Ⓐ.

❷ Fix the tonearm to the armrest.

❸ Install the brake drum and adjust the position of the brake drum so that the straight side runs parallel with the frame. Fix the brake drum by turning the set screw.

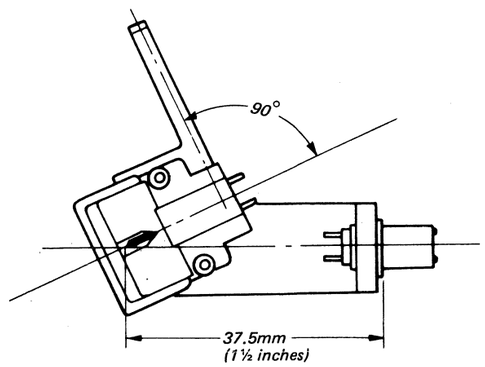
Fig. 2-4

LEAD WIRE CONNECTION

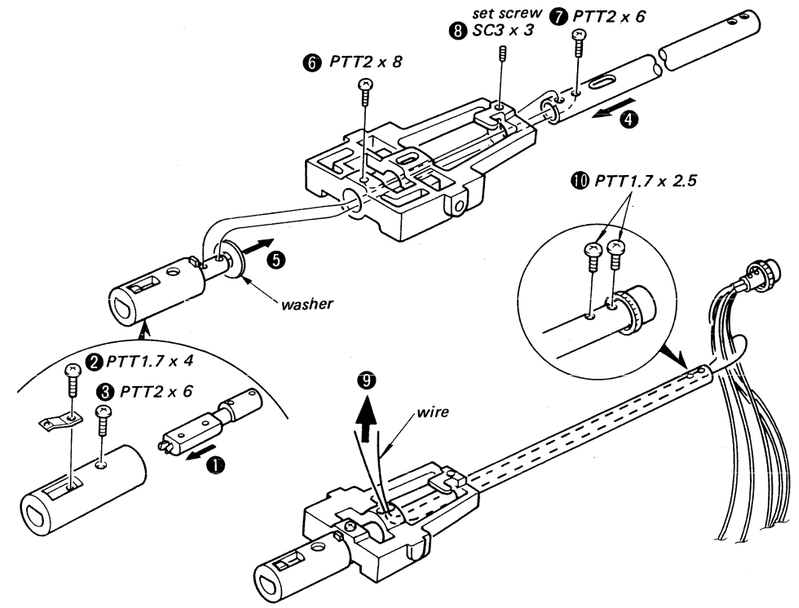


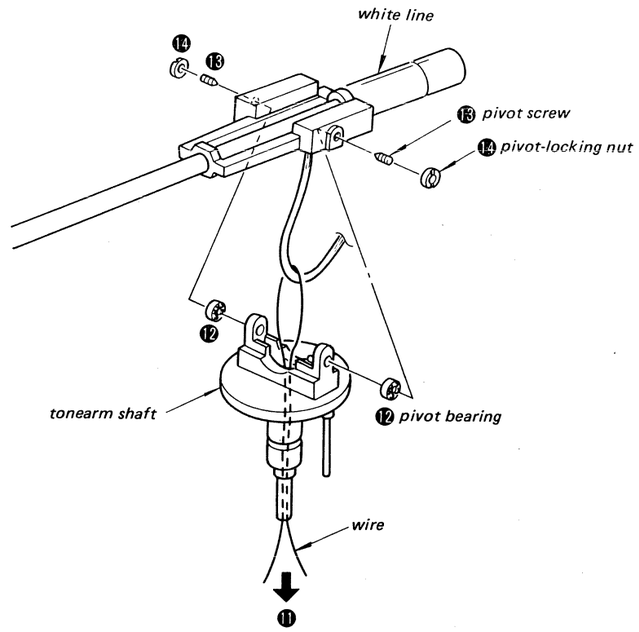
blue: left channel (ground)
white: left channel (signal)
green: right channel (ground)
red: right channel (signal)

CARTRIDGE INSTALLATION

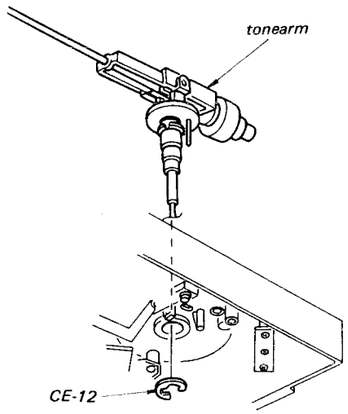


TONEARM INSTALLATION (1)





TONEARM INSTALLATION (2)



Note:
After the installation, perform the longitudinal sensitivity adjustment. (See page 13.)

MOTOR INSTALLATION

The motor and the servo amp board are assembled together. If found defective, disassemble the motor block as shown in Fig. 2-5 and repair it.

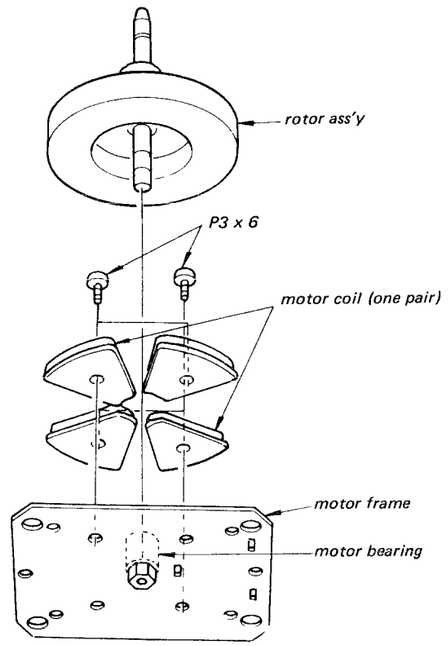


Fig. 2-5

1. When the rotor ass'y is replaced, apply two drops of the SONY oil (OL-2KA) in the pivot.
2. When the motor bearing is replaced, apply two drops of the SONY oil (OL-2KA) in the pivot.

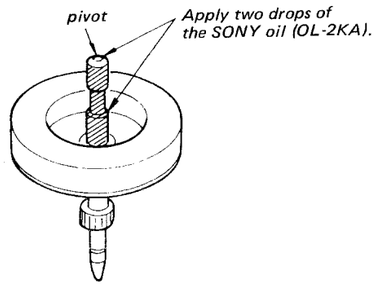


Fig. 2-6

3. The motor coils are composed of two pairs.
   a) Mount the coils on the motor frame so that the boss of the coil is placed in the hole of the frame as illustrated in Fig. 2-7.
   b) Push the coils in the direction of the arrow and tighten the screws.
   c) Lay the leads of the coils as shown in Fig. 2-8 and fix the leads in the groove between the portions marked by * in Fig. 2-9.
4. Insert the rotor assembly slowly in the motor bearing so that the motor shaft is not attracted by storng magnetic field strength.

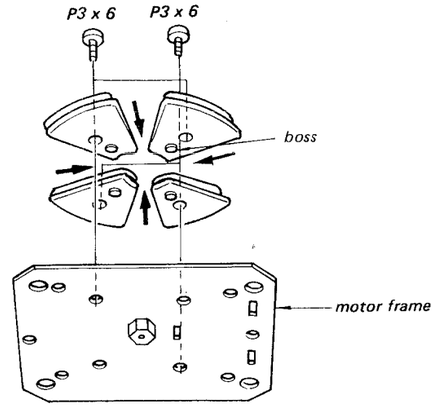


Fig. 2-7

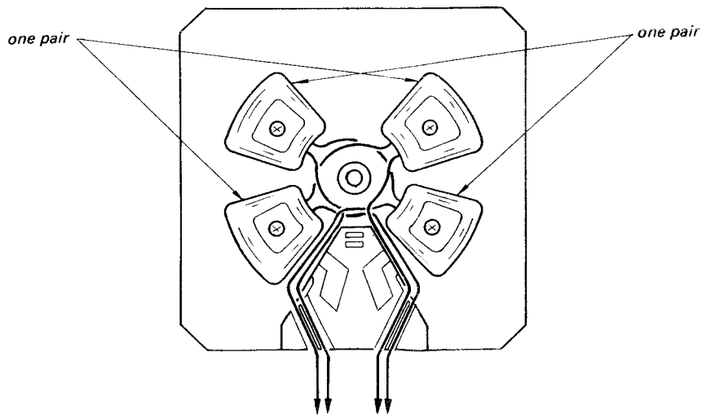


Fig. 2-8

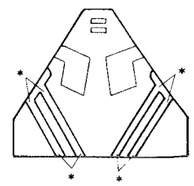


Fig. 2-9

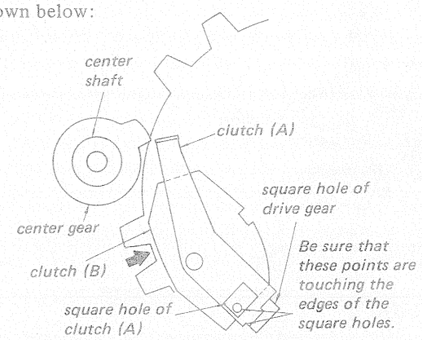
SECTION 3
ADJUSTMENTS

3-1 MECHANICAL ADJUSTMENTS

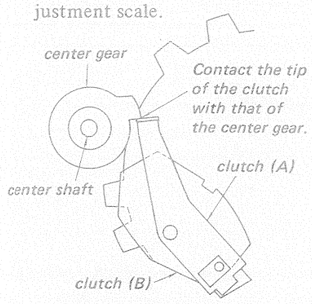
Automatic Return Position Adjustment

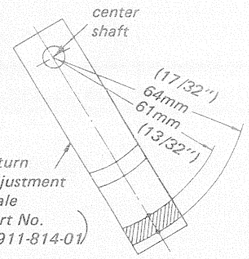
- POWER switch: OFF

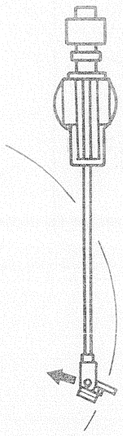
1. Remove the sheet and the turntable.
2. Put the tonearm on the arm rest.
3. Turn the center shaft clockwise by hand and turn the drive gear one turn by engaging the center gear with the drive gear. Then place the drive gear in the disengaging position.
4. Push the clutch (B) in the direction shown by the arrow and place the clutch (A) and clutch (B) as shown below:


center shaft
clutch (A)
square hole of drive gear
center gear
clutch (B)
Be sure that these points are touching the edges of the square holes.
square hole of clutch (A)

5. Put the return adjustment scale (Part No. 9-911-814-01) on the center shaft.
6. Move the tonearm toward the center shaft by hand so that the clutch (A) is positioned as shown below and confirm that the stylus is located on the hatched area of the return adjustment scale.



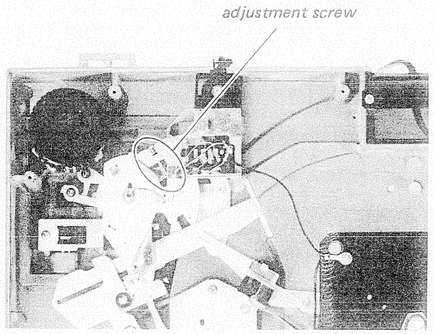


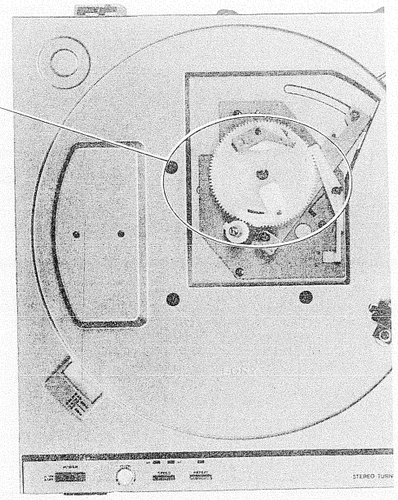


7. If necessary, adjust the adjustment screw.

Stylus Position	Adjustment Screw
outside of hatched area	clockwise
inside of hatched area	counterclockwise
on hatched area	correct

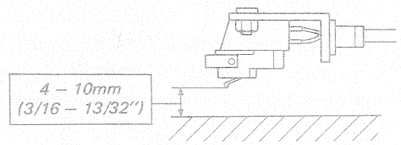
8. Play the automatic-return test record (YFSC-16, A side "C-3") and confirm that the tonearm returns at count 4 to 11.

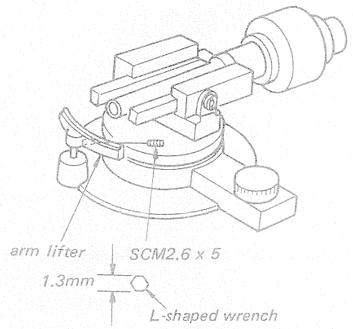


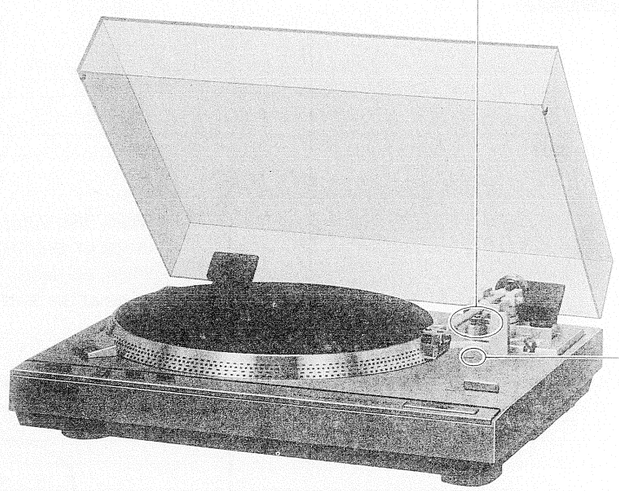


Stylus Height Adjustment

1. Bring the tonearm above the record.
2. Lift the arm lifter up and make sure that the clearance between the stylus tip and the record is 4 – 10 mm (3/16 – 13/32 inches).
3. If necessary, loosen the set screw and adjust the arm lifter height.



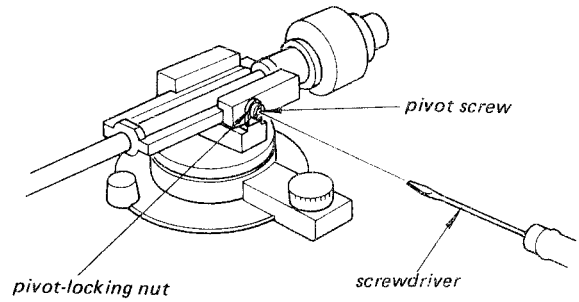


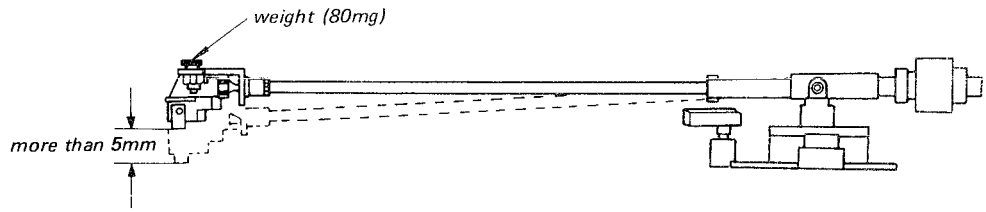


Longitudinal Sensitivity Adjustment

1. Make the longitudinal balance adjustment of tonearm.
2. Repeating the following procedures, adjust the pivot screw and the pivot-locking nut.
   a. When the 80 mg weight is placed on the top of the shell, the tonearm sinks more than 5 mm (measured at stylus-tip.)
   b. When the weight is removed, the tonearm returns horizontally.

Note: Rotate the left and right pivot screws by same numbers of turns.



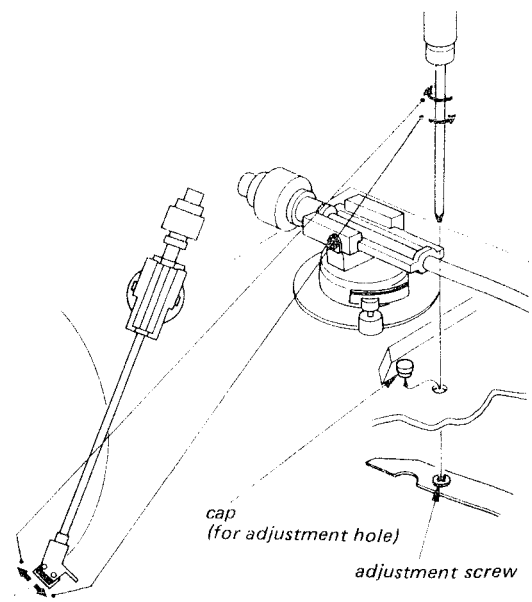


Stylus Drop-point Adjustment

1. Remove the rubber cap.
2. Make sure that the stylus drops on the specified point of the test record.
   test record: YFSC-16

Record size	Count of drop-point
30 (12")	4 to 16
17 (7")	6 to 24

3. If necessary, insert the screw-driver into the hole and adjust the drop-point by turning the adjustment screw.
   To change the drop-point inward:
   Turn the adjustment screw slightly clockwise. (The figure of the drop-point will be large.)
   To change the drop-point outward:
   Turn the adjustment screw slightly counter-clockwise. (The figure of the drop-point will be small.)



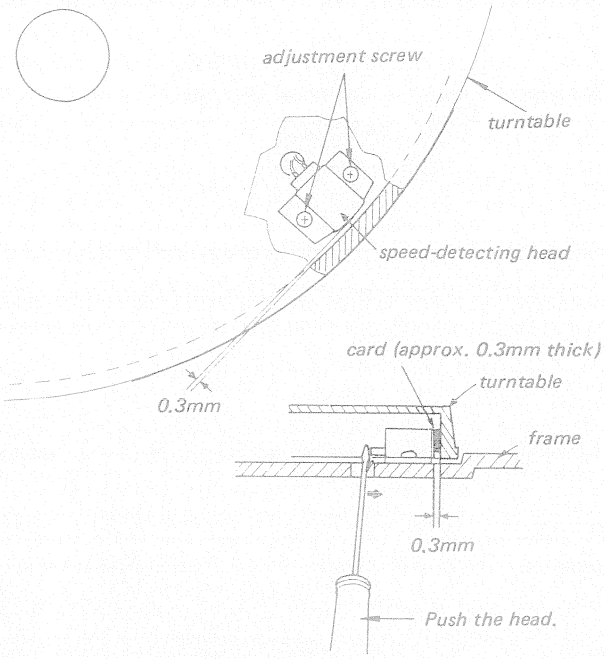
Note 2: Once it is properly adjusted with a 30 cm (12") record, the drop-point will be correct for 17 cm (7") records.

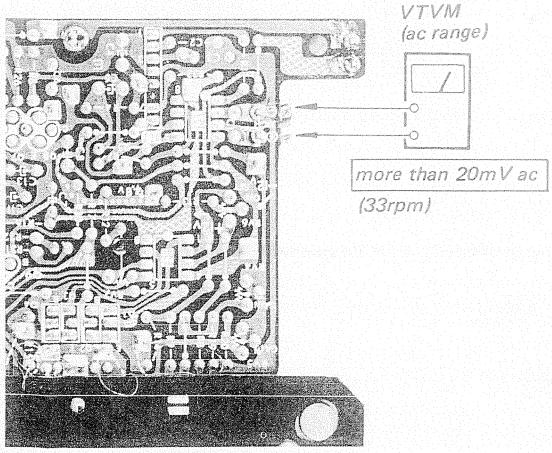
3-2. ELECTRICAL ADJUSTMENTS

Speed-Detecting Head Output Adjustment

1. Adjust the position of the speed-detecting head by loosening two screws so that the VTVM reading is more than 20mV ac at 33 rpm.
2. Make sure that the head does not touch the turntable and tighten the screws securely.

Reference:
Adjust the position of the speed-detecting head by inserting a card (approx. 0.3mm thick) between the magnetic coating of the turntable and the speed-detecting head.

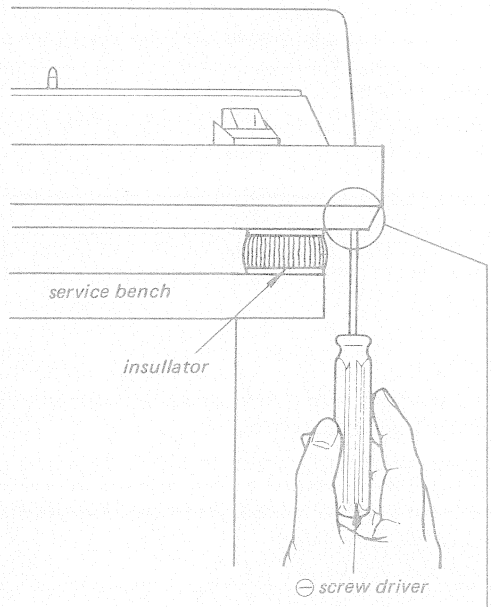


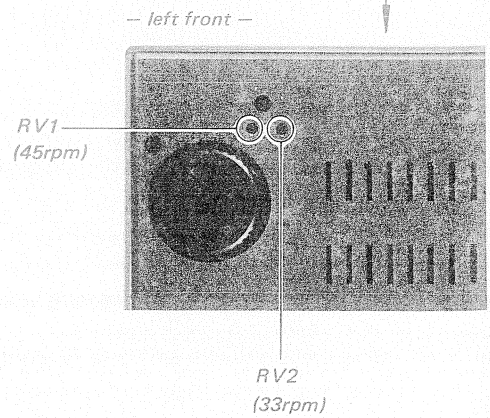


Turntable Speed Adjustment

If correct speeds cannot be obtained by adjusting the PITCH control, adjust RV2 (33 rpm) and RV1 (45 rpm) at the bottom of the case through corresponding adjustment hole.

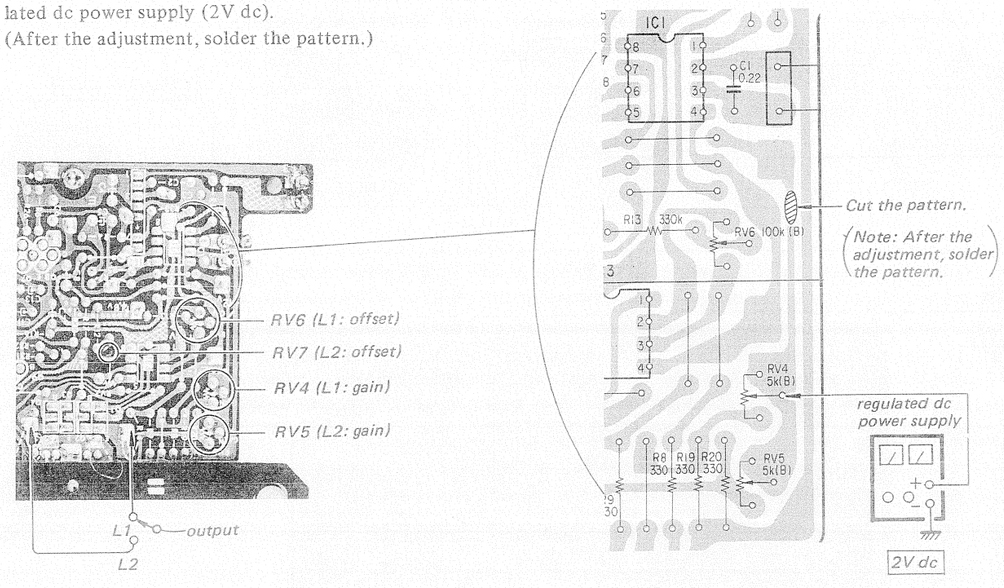
1. Place the set as illustrated for easy access to the adjustment hole.
2. Set the record size selector knob to the MANUAL position and push the START/STOP switch.
3. Set the PITCH control knob at the center position.
4. Adjust RV2 (33 rpm) and RV1 (45 rpm) so that the stroboscope pattern appears stationary.





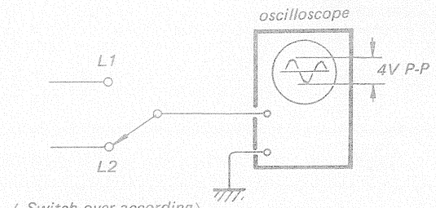
Gain/Offset Adjustment

- Cut the pattern as shown below and apply regulated dc power supply (2V dc).
(After the adjustment, solder the pattern.)



Hall Device Gain Adjustment (33 rpm)

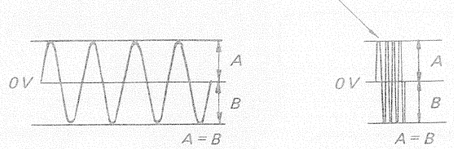
1. Connect an oscilloscope to L1 and adjust RV4 to obtain 4Vp-p.
2. Connect an oscilloscope to L2 and adjust RV5 to obtain 4Vp-p.

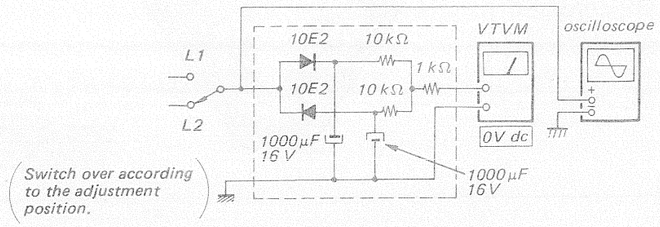


Motor Amp Offset Adjustment (33 rpm)

1. Connect VTVM or oscilloscope to L1 and adjust RV6 for 0V dc VTVM reading or for the waveform on oscilloscope as shown below.
2. Connect VTVM or oscilloscope to L2 and adjust RV7 for 0V dc VTVM reading or for the waveform on oscilloscope as shown below.

Note: Set the sweep time longer for easy waveform checking.



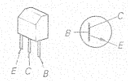


Replacement Semiconductors

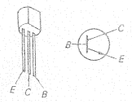
NJM4558D
μPC4558C

CX065A
CX065B

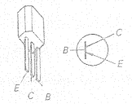
2SD774



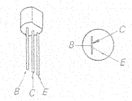
2SC1475
2SC1815
2SC1364



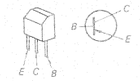
2SA1015
2SA1027R



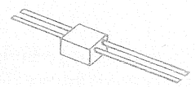
2SB740



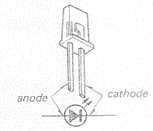
2SB734



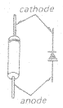
HL300C



SEL1120R



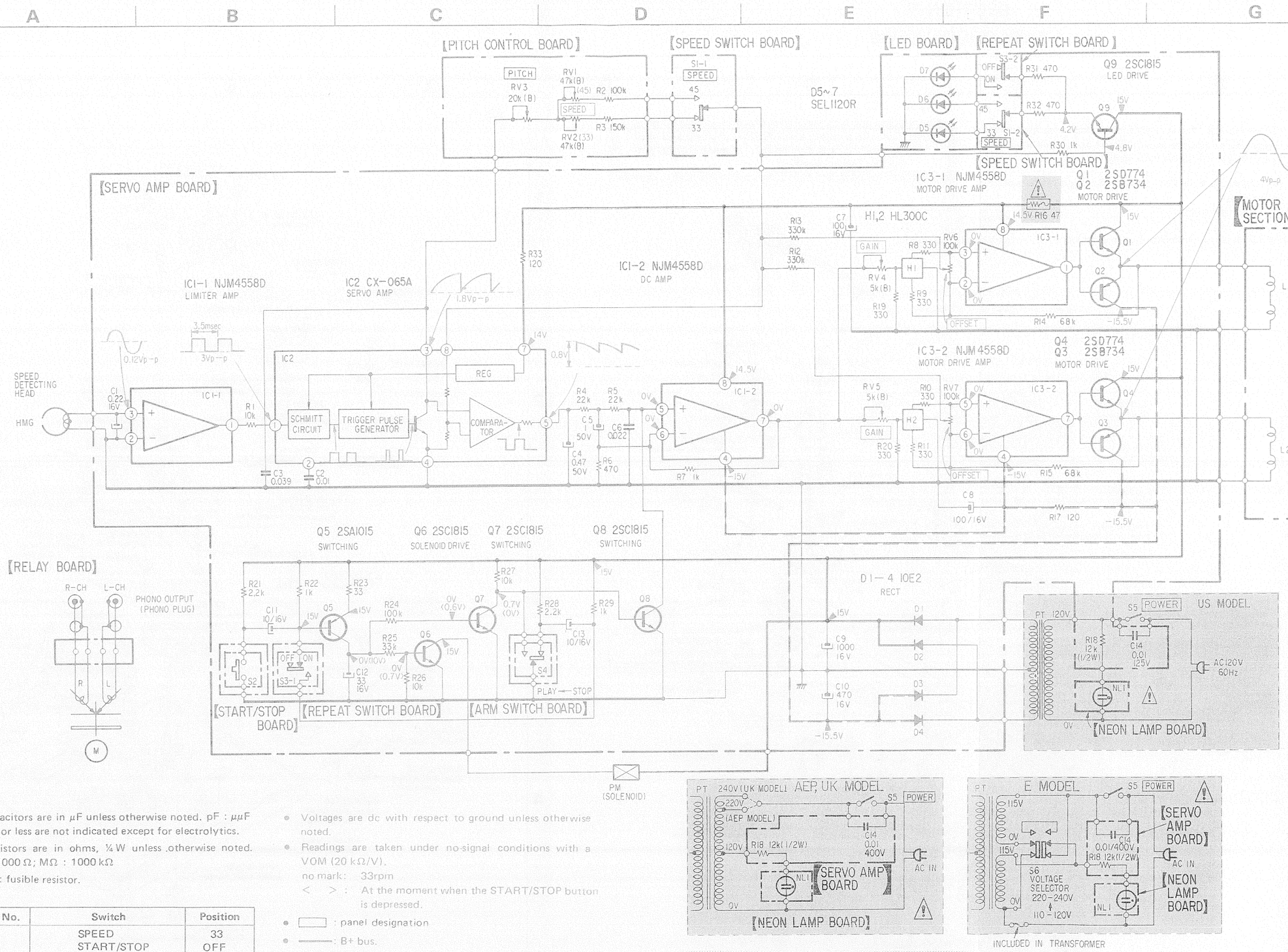
10E2



1/4 WATT CARBON RESISTORS

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-576-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-577-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-578-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-579-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-580-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-581-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-582-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-583-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-584-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-585-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-586-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-587-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

PS-T33 PS-T33



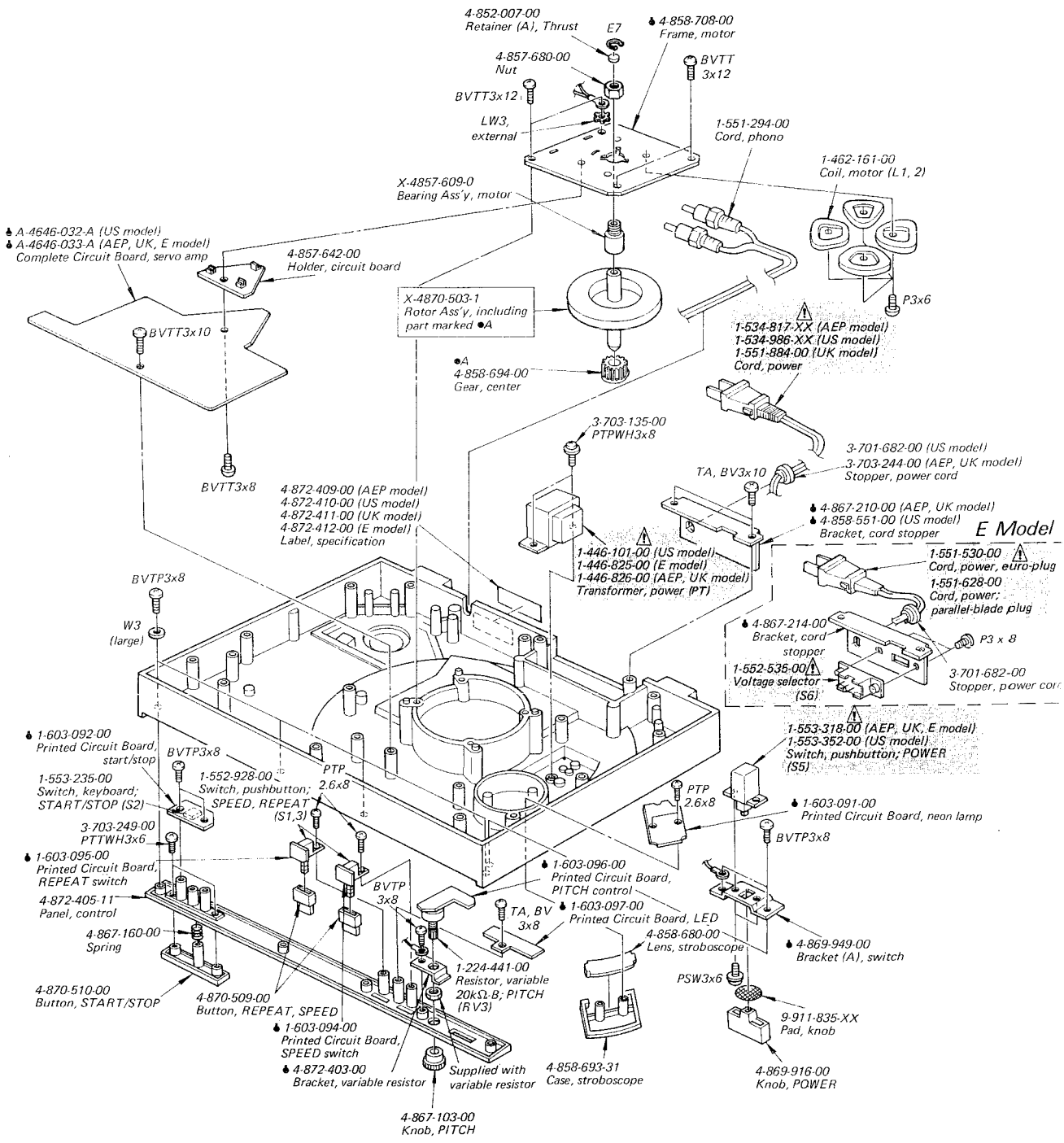
- All capacitors are in μF unless otherwise noted. pF : μμF 50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ : 1000 Ω; MΩ : 1000 kΩ
- : fusible resistor.
- Switch

Ref. No.	Switch	Position
S1	SPEED	33
S2	START/STOP	OFF
S3	REPEAT	OFF
S4	ARM RESET	OFF
S5	POWER	OFF
S6	VOLTAGE SELECTOR	110 – 120V

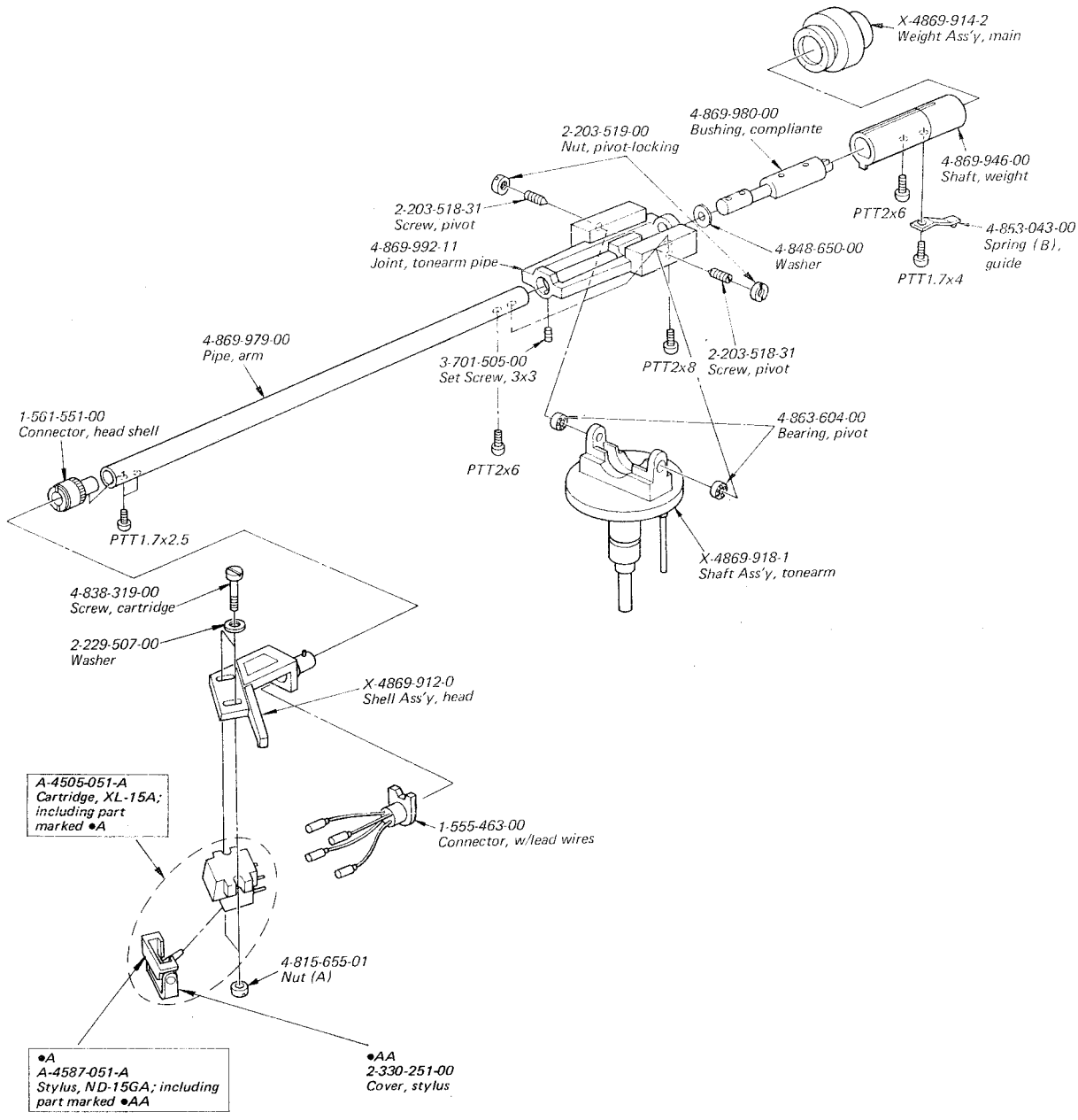
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (20 kΩ/V).
  no mark: 33rpm
  < > : At the moment when the START/STOP button is depressed.
- : panel designation
- : B+ bus.
- : B– bus.
- : adjustment for repair.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

5-3.


4-852-007-00
Retainer (A), Thrust
E7
4-858-708-00
Frame, motor
4-857-680-00
Nut
BVTT
3x12
BVTT3x12
LW3,
external
1-551-294-00
Cord, phono
1-462-161-00
Coil, motor (L1, 2)
X-4857-609-0
Bearing Ass'y, motor
A-4646-032-A (US model)
A-4646-033-A (AEP, UK, E model)
Complete Circuit Board, servo amp
4-857-642-00
Holder, circuit board
X-4870-503-1
Rotor Ass'y, including
part marked •A
P3x6
BVTT3x10
•A
4-858-694-00
Gear, center
1-534-817-XX (AEP model)
1-534-986-XX (US model)
1-551-884-00 (UK model)
Cord, power
3-703-135-00
PTPWH3x8
3-701-682-00 (US model)
3-703-244-00 (AEP, UK model)
Stopper, power cord
TA, BV3x10
BVTT3x8
4-872-409-00 (AEP model)
4-872-410-00 (US model)
4-872-411-00 (UK model)
4-872-412-00 (E model)
Label, specification
4-867-210-00 (AEP, UK model)
4-858-551-00 (US model)
Bracket, cord stopper
E Model
1-446-101-00 (US model)
1-446-825-00 (E model)
1-446-826-00 (AEP, UK model)
Transformer, power (PT)
1-551-530-00
Cord, power, euro-plug
1-551-628-00
Cord, power;
parallel-blade plug
BVTP3x8
W3
(large)
4-867-214-00
Bracket, cord
stopper
P3 x 8
1-552-535-00
Voltage selector
(S6)
3-701-682-00
Stopper, power cord
1-553-318-00 (AEP, UK, E model)
1-553-352-00 (US model)
Switch, pushbutton; POWER
(S5)
1-603-092-00
Printed Circuit Board,
start/stop
BVTP3x8
PTP
2.6x8
1-552-928-00
Switch, pushbutton;
SPEED, REPEAT
(S1,3)
1-553-235-00
Switch, keyboard;
START/STOP (S2)
PTP
2.6x8
1-603-091-00
Printed Circuit Board, neon lamp
BVTP3x8
3-703-249-00
PTTWH3x6
1-603-095-00
Printed Circuit Board,
REPEAT switch
1-603-096-00
Printed Circuit Board,
PITCH control
BVTP
3x8
TA, BV
3x8
1-603-097-00
Printed Circuit Board, LED
4-872-405-11
Panel, control
4-858-680-00
Lens, stroboscope
4-869-949-00
Bracket (A), switch
4-867-160-00
Spring
1-224-441-00
Resistor, variable
20kΩ-B; PITCH
(RV3)
PSW3x6
4-870-510-00
Button, START/STOP
4-870-509-00
Button, REPEAT, SPEED
9-911-835-XX
Pad, knob
1-603-094-00
Printed Circuit Board,
SPEED switch
4-872-403-00
Bracket, variable resistor
Supplied with
variable resistor
4-858-693-31
Case, stroboscope
4-869-916-00
Knob, POWER
4-867-103-00
Knob, PITCH

5-4.


X-4869-914-2
Weight Ass'y, main
4-869-980-00
Bushing, compliante
2-203-519-00
Nut, pivot-locking
4-869-946-00
Shaft, weight
2-203-518-31
Screw, pivot
PTT2x6
4-853-043-00
Spring (B), guide
4-869-992-11
Joint, tonearm pipe
4-848-650-00
Washer
PTT1.7x4
4-869-979-00
Pipe, arm
3-701-505-00
Set Screw, 3x3
PTT2x8
2-203-518-31
Screw, pivot
1-561-551-00
Connector, head shell
4-863-604-00
Bearing, pivot
PTT2x6
PTT1.7x2.5
X-4869-918-1
Shaft Ass'y, tonearm
4-838-319-00
Screw, cartridge
2-229-507-00
Washer
X-4869-912-0
Shell Ass'y, head
A-4505-051-A
Cartridge, XL-15A; including part marked •A
1-555-463-00
Connector, w/lead wires
4-815-655-01
Nut (A)
•A
A-4587-051-A
Stylus, ND-15GA; including part marked •AA
•AA
2-330-251-00
Cover, stylus

SECTION 6
ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description

SEMICONDUCTORS

Transistors

Q1	8-760-413-10	2SC1475
Q2, 3	8-729-374-02	2SB740
Q4	8-760-413-10	2SC1475
Q5	8-729-612-77	2SA1027R
Q6–9	8-729-663-47	2SC1364

ICs

IC1	8-759-145-58	μPC4558C
IC2	8-759-602-65	CX065B
IC3	8-759-145-58	μPC4558C

Diodes

D1–4	8-719-200-02	10E2
D5–7	8-719-311-20	SEL1120R
H1, 2	8-719-903-00	HL300C (Hall Device)

RESISTORS

All resistors are in ohms. Common ¼W carbon resistors are omitted. Refer to the list on page 16 for their part numbers.

R16	⚠ 1-212-873-00	47	¼W	fusible
R18	⚠ 1-244-899-00	12k	½W	carbon
RV1, 2	1-226-238-00	50k-B, adjustable; speed		
RV3	1-224-441-00	20k-B, variable; PITCH		
RV4, 5	1-226-430-00	5k-B, adjustable; gain		
RV6	1-226-434-00	100k-B, adjustable; offset		
RV7	1-226-239-00	100k-B, adjustable; offset		

CAPACITORS

All capacitors are in μF. Common capacitors are omitted. Refer to the lists on pages 27 and 28 for their part numbers.

C14	⚠ 1-161-744-00	0.01	400V ceramic (AEP, UK, E model)
	⚠ 1-161-749-00	0.01	125V ceramic (US model)

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

MISCELLANEOUS

HMG	1-543-123-00	Head, speed detecting
L1, 2	1-462-161-00	Coil, Motor
NL1	⚠ 1-519-135-00	Lamp, neon.
PM	1-454-196-00	Solenoid
PT	1-446-101-00	Transformer, power (US model)
	⚠ 1-446-825-00	Transformer, power (E model)
	1-446-826-00	Transformer, power (AEP, UK model)
S1	1-552-928-00	Switch, pushbutton; SPEED
S2	1-553-235-00	Switch, keyboard; START/STOP
S3	1-552-928-00	Switch, pushbutton; REPEAT
S4	1-552-532-00	Switch, miniature; arm
S5	⚠ 1-553-318-00	Switch, pushbutton, POWER (AEP, UK, E model)
	1-553-352-00	Switch, pushbutton; POWER (US model)
S6	⚠ 1-552-535-00	Voltage Selector (E model)
	A-4505-051-A	Cartridge, XL-15A
	1-452-059-00	Magnet, brake
	♦ 1-508-799-00	Base Post
	♦ 1-508-800-13	Base Post
	⚠ 1-534-817-XX	Cord, power (AEP model)
	⚠ 1-534-986-XX	Cord, power (US model)
	1-551-294-00	Cord, phono
	⚠ 1-551-530-00	Cord, power; euro-plug (E model)
	⚠ 1-551-628-00	Cord, power; parallel blabe plug (E model)
	⚠ 1-551-884-00	Cord, power (UK model)
	1-555-463-00	Connector, w/lead wire
	♦ 1-560-265-00	Base Post
	1-561-551-00	Connector, head shell

PRINTED CIRCUIT BOARDS

♦ 1-600-039-00	Relay
♦ 1-603-091-00	Neon Lamp
♦ 1-603-092-00	Start/stop Switch
♦ 1-603-093-00	Arm Switch
♦ 1-603-094-00	SPEED Switch

- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Part No.	*Description*
● 1-603-095-00	REPEAT Switch
● 1-603-096-00	PITCH Control
● 1-603-097-00	LED

COMPLETE CIRCUIT BOARDS

● A-4646-032-A	Servo Amp (US model)
● A-4646-033-A	Servo Amp (AEP, UK, E model)

● Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

ACCESSORIES AND PACKING MATERIALS

Part No.	*Description*
3-701-613-00	Bag, plastic
3-701-616-00	Bag, plastic
3-701-630-00	Bag, plastic
3-701-634-00	Bag, plastic
3-701-806-00	Adaptor, 45 rpm
3-783-269-11	Manual, instruction (AEP, UK, E model)
3-783-269-21	Manual, instruction (US model)
3-793-395-11	Gauge, tracking error check
4-847-314-00	Bag, plastic
4-862-043-00	Cushion, tonearm
4-862-680-00	Protection
4-863-668-00	Stopper, drive gear
4-869-962-00	Adjustor, drop-point
4-869-974-00	Holder, turntable
4-869-975-00	Cushion, right
4-869-976-00	Cushion, left
4-869-977-00	Box, accessory
4-869-981-00	Sub-weight
4-870-529-00	Case, head shell
4-870-530-00	Label, head shell
4-872-413-00	Carton
X-4869-915-00	Screw Ass'y, cartridge
including:	
4-838-319-01	Screw, cartridge
4-841-044-00	Washer, cartridge

ELECTROLYTIC CAPACITORS

RATING → : Use the high voltage rated one.

CAP. (μF)	6.3 VOLT. PART No.	10 VOLT. PART No.	16 VOLT. PART No.	25 VOLT. PART No.	35 VOLT. PART No.	50 VOLT. PART No.
0.47					→	1-121-726-00
1.0					→	1-121-391-00
2.2					→	1-121-450-00
3.3	→	→	→	1-121-392-00	→	1-121-393-00
4.7	→	→	→	1-121-395-00	→	1-121-396-00
10	→	→	1-121-651-00	1-121-398-00	→	1-121-738-00
22	→	→	1-121-479-00	1-121-480-00	1-121-662-00	1-121-152-00
33	→	→	1-121-403-00	1-121-404-00	1-121-652-00	1-121-405-00
47	→	1-121-352-00	1-121-409-00	1-121-410-00	1-121-653-00	1-121-411-00
100	→	1-121-414-00	1-121-415-00	1-121-416-00	1-121-357-00	1-121-417-00
220	1-121-419-00	1-121-420-00	1-121-421-00	1-121-422-00	1-121-261-00	1-121-423-00
330	1-121-751-00	1-121-805-00	1-121-521-00	1-121-654-00	1-121-655-00	1-121-656-00
470	1-121-424-00	1-121-425-00	1-121-426-00	1-121-733-00	1-121-361-00	1-121-810-00
1000	-	1-121-736-00	1-121-245-00	1-121-657-00	1-121-388-00	1-123-061-00
2200	1-121-658-00	1-121-659-00	1-121-660-00	1-123-067-00	1-121-984-00	-
3300	1-121-661-00	1-123-075-00	1-123-071-00	-	-	-

CAP. (μF)	100 VOLT. PART No.	160 VOLT. PART No.	250 VOLT. PART No.	350 VOLT. PART No.
0.47	-	-	-	-
1.0	1-123-249-00	1-123-252-00	1-123-003-00	1-121-168-00
2.2	1-123-250-00	1-123-026-00	-	1-123-028-00
3.3	1-121-995-00	-	1-123-004-00	1-123-006-00
4.7	1-123-255-00	1-121-246-00	1-121-759-00	1-123-007-00
10	1-121-126-00	1-121-999-00	1-123-254-00	1-123-008-00
22	1-121-996-00	1-123-253-00	1-123-005-00	1-123-022-00
33	1-121-997-00	1-121-757-00	-	-
47	1-123-251-00	1-121-919-00	-	-
100	1-123-084-00	-	-	-

CERAMIC CAPACITORS

RATING

CAP. (pF)	50 VOLT. PART No.	CAP. (pF)	50 VOLT. PART No.	CAP. (pF)	50 VOLT. PART No.	CAP. (μF)	50 VOLT. PART No.
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-00
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-00
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-00
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-00
2.0	1-102-935-00	33	1-102-963-00	220	1-102-978-00	0.0022	1-102-121-00
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-00
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-00
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-00
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-00
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-00
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-00
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-00
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-00
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022	1-101-005-00
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-00
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00		
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00		
16	1-102-952-00	110	1-102-815-00				
18	1-102-953-00	120	1-102-816-00				
20	1-102-958-00	130	1-101-081-00				

0.001μF = 1,000pF

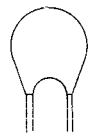
CERAMIC (SEMICONDUCTOR) CAPACITORS

RATING → : Use the high voltage rated one.

CAP. (μF)	25 VOLT. PART No.	50 VOLT. PART No.	CAP. (μF)	25 VOLT. PART No.	50 VOLT. PART No.
0.001	→	1-161-039-00	0.018	1-161-016-00	1-161-054-00
0.0012	→	1-161-040-00	0.022	1-161-017-00	1-161-055-00
0.0015		1-161-041-00	0.027	1-161-018-00	1-161-056-00
0.0018		1-161-042-00	0.033	1-161-019-00	1-161-057-00
0.0022		1-161-043-00	0.039	1-161-010-00	1-161-058-00
0.0027	→	1-161-044-00	0.047	1-161-021-00	1-161-059-00
0.0033	→	1-161-045-00	0.056	→	1-161-060-00
0.0039	→	1-161-046-00	0.068	→	1-161-061-00
0.0047	→	1-161-047-00	0.082	1-161-024-00	1-161-062-00
0.0056	→	1-161-048-00	0.1	1-161-025-00	1-161-063-00
0.0068	→	1-161-049-00			
0.0082	1-161-012-00	1-161-050-00			
0.01	1-161-013-00	1-161-051-00			
0.012	→	1-161-052-00			
0.015	1-161-015-00	1-161-053-00			

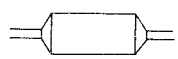
MYLAR CAPACITORS

CAP. (μF)	RATING 50 VOLT. PART No.	100 VOLT. PART No.	200 VOLT. PART No.	CAP. (μF)	50 VOLT. PART No.	100 VOLT. PART No.	200 VOLT. PART No.	CAP. (μF)	50 VOLT. PART No.	100 VOLT. PART No.	200 VOLT. PART No.
0.001	1-108-227-00	1-108-365-00	1-108-409-00	0.01	1-108-239-00	1-108-377-00	1-108-421-00	0.1	1-108-251-00	1-108-389-00	1-108-433-00
0.0012	1-108-351-00	1-108-366-00	1-108-410-00	0.012	1-108-357-00	1-108-378-00	1-108-422-00	0.12	1-108-363-00	1-108-390-00	1-108-434-00
0.0015	1-108-228-00	1-108-367-00	1-108-411-00	0.015	1-108-240-00	1-108-379-00	1-108-423-00	0.15	1-108-252-00	1-108-391-00	1-108-435-00
0.0018	1-108-352-00	1-108-368-00	1-108-412-00	0.018	1-108-358-00	1-108-380-00	1-108-424-00	0.18	1-108-364-00	1-108-392-00	1-108-436-00
0.0022	1-108-230-00	1-108-369-00	1-108-413-00	0.022	1-108-242-00	1-108-381-00	1-108-425-00	0.22	1-108-254-00	1-108-393-00	1-108-437-00
0.0027	1-108-353-00	1-108-370-00	1-108-414-00	0.027	1-108-359-00	1-108-382-00	1-108-426-00	0.27	1-108-854-00	–	–
0.0033	1-108-232-00	1-108-371-00	1-108-415-00	0.033	1-108-244-00	1-108-383-00	1-108-427-00	0.33	1-108-855-00	–	–
0.0039	1-108-354-00	1-108-372-00	1-108-416-00	0.039	1-108-360-00	1-108-384-00	1-108-428-00	0.39	1-108-856-00	–	–
0.0047	1-108-234-00	1-108-373-00	1-108-417-00	0.047	1-108-246-00	1-108-385-00	1-108-429-00	0.47	1-108-857-00	–	–
0.0056	1-108-355-00	1-108-374-00	1-108-418-00	0.056	1-108-361-00	1-108-386-00	1-108-430-00				
0.0068	1-108-237-00	1-108-375-00	1-108-419-00	0.068	1-108-249-00	1-108-387-00	1-108-431-00				
0.0082	1-108-356-00	1-108-376-00	1-108-420-00	0.082	1-108-362-00	1-108-388-00	1-108-432-00				



TANTALUM CAPACITORS

CAP. (μF)	RATING → : Use the high voltage rated one. 3.15 VOLT. PART No.	6.3 VOLT. PART No.	10 VOLT. PART No.	16 VOLT. PART No.	20 VOLT. PART No.	25 VOLT. PART No.	35 VOLT. PART No.
0.01					→	→	1-131-396-00
0.015						→	1-131-397-00
0.022						→	1-131-398-00
0.033						→	1-131-399-00
0.047						→	1-131-400-00
0.068					→	→	1-131-401-00
0.1					→	→	1-131-402-00
0.15					→	→	1-131-403-00
0.22					→	→	1-131-404-00
0.33					→	1-131-409-00	1-131-405-00
0.47	–	–	–	–	1-131-412-00	→	1-131-406-00
0.68	–	–	–	1-131-415-00	→	1-131-410-00	1-131-407-00
1.0	–	–	1-131-418-00	–	1-131-413-00	→	1-131-408-00
1.5	–	1-131-421-00	–	1-131-416-00	→	1-131-411-00	1-131-348-00
2.2	1-131-424-00	–	1-131-419-00	–	1-131-414-00	1-131-355-00	1-131-349-00
3.3	–	1-131-422-00	–	1-131-417-00	1-131-362-00	1-131-356-00	1-131-350-00
4.7	1-131-425-00	–	1-131-420-00	1-131-369-00	1-131-363-00	1-131-357-00	1-131-351-00
6.8	–	1-131-423-00	1-131-376-00	1-131-370-00	1-131-364-00	1-131-358-00	1-131-352-00
10	1-131-426-00	1-131-383-00	1-131-377-00	1-131-371-00	1-131-365-00	1-131-359-00	1-131-353-00
15	1-131-390-00	1-131-384-00	1-131-378-00	1-131-372-00	1-131-366-00	1-131-360-00	–
22	1-131-391-00	1-131-385-00	1-131-379-00	1-131-373-00	1-131-367-00		
33	1-131-392-00	1-131-386-00	1-131-380-00	1-131-374-00			
47	1-131-393-00	1-131-387-00	1-131-381-00	–			
68	1-131-394-00	1-131-388-00	–	–			
100	1-131-395-00	–	–	–			



TANTALUM CAPACITORS

CAP. (μF)	RATING 3 VOLT. PART No.	6.3 VOLT. PART No.	10 VOLT. PART No.	16 VOLT. PART No.	20 VOLT. PART No.	35 VOLT. PART No.
0.033						1-131-273-00
0.047						1-131-274-00
0.068						1-131-275-00
0.1						1-131-276-00
0.15						1-131-277-00
0.22			–	–	1-131-262-00	1-131-278-00
0.33			–	–	1-131-263-00	1-131-279-00
0.47			1-131-169-00	–	1-131-264-00	1-131-280-00
0.68			–	1-131-258-00	1-131-265-00	1-131-281-00
1.0			1-131-254-00	–	1-131-266-00	1-131-282-00
1.5		1-131-250-00	–	–	1-131-267-00	1-131-283-00
2.2		–	–	1-131-259-00	1-131-268-00	1-131-284-00
3.3		–	1-131-255-00	–	1-131-269-00	–
4.7		1-131-251-00	1-131-171-00	–	1-131-270-00	–
6.8		–	–	1-131-260-00	1-131-271-00	–
10	–	–	1-131-256-00	–	1-131-272-00	–
15	–	1-131-252-00	–	1-131-261-00		
22	–		1-131-257-00	–		
33	1-131-176-00	1-131-253-00	1-131-173-00	–		
47	1-131-288-00	1-131-174-00	–	–		
100	1-131-177-00					

Sony Corporation

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STEREO TURNTABLE SYSTEM

PS-T33

US Model
AEP Model
UK Model
E Model
Canadian Model

SUPPLEMENT

File this supplement with the service manual.

No. 1
September, 1980

Add the following parts in the electrical parts list on page 25.

MISCELLANEOUS

Ref. No.	*Part No.*	*Description*
S1	1-552-928-00	Switch, pushbutton; SPEED
S2	1-553-235-00	Switch, keyboard; START/STOP
S3	1-552-928-00	Switch, pushbutton; REPEAT
S4	1-552-532-00	Switch, miniature; arm

Ref. No.	*Part No.*	*Description*
	1-551-294-00	Cord, phono
	⚠1-551-530-00	**Cord, power; parallel-blade plug (E model)**

9-958-816-81

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